

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of
Shinya Kovayashi

Docket No. HO4-3303/HO

Serial No.: 09/805,216

Group Art Unit: No.2853

Filed: March 14, 2001

Examiner: Nguyen, Lam S.

For: **LINE SCANNING TYPE INK JET RECORDING
DEVICE CAPABLE OF FINELY AND INDIVIDUALLY
CONTROLLING INK EJECTION FROM EACH NOZZLE**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

SUBMISSION OF FORMAL DRAWINGS

Sir:

Submitted herewith are eleven (11) sheets of formal drawing comprising Figures 1 to 11 for the above-identified patent application, filed in response to the Office Action dated January 17, 2003. Please note that Figures 1-4, 6-8, 15, 19-20 have been corrected to coordinate the drawings with specification in accordance with the paper submitted on October 21, 2002. Acknowledgment of receipt is respectfully requested.

Respectfully submitted,

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12/Formal
Drawings
P. d. H. H.
3-24-03



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FIG. 1

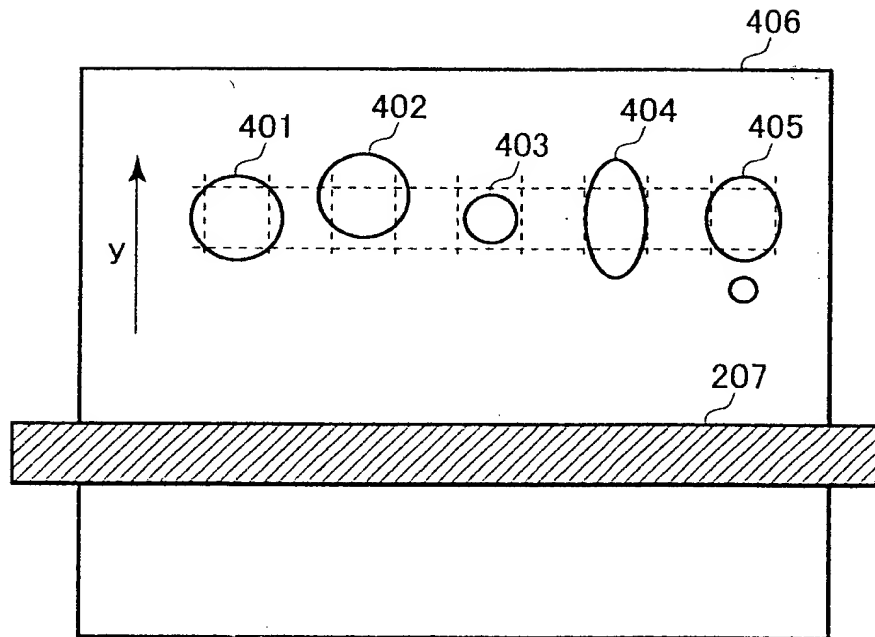
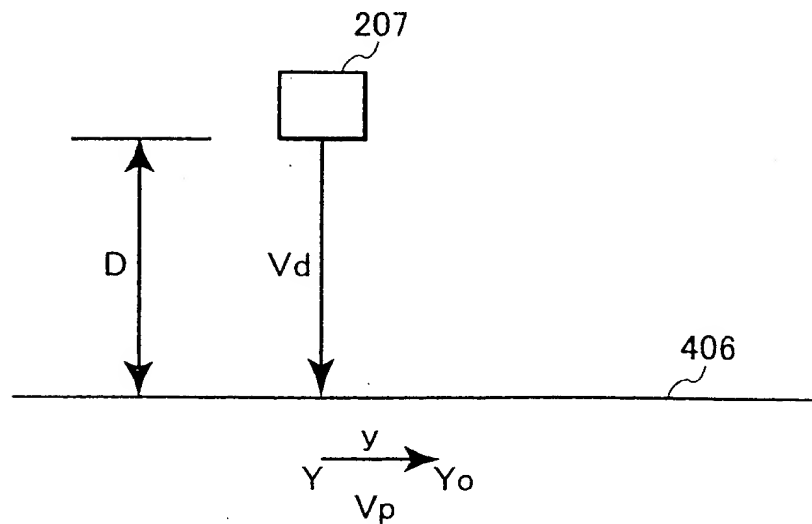
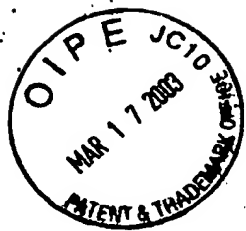


FIG. 2



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FIG.3

GRAPH F1

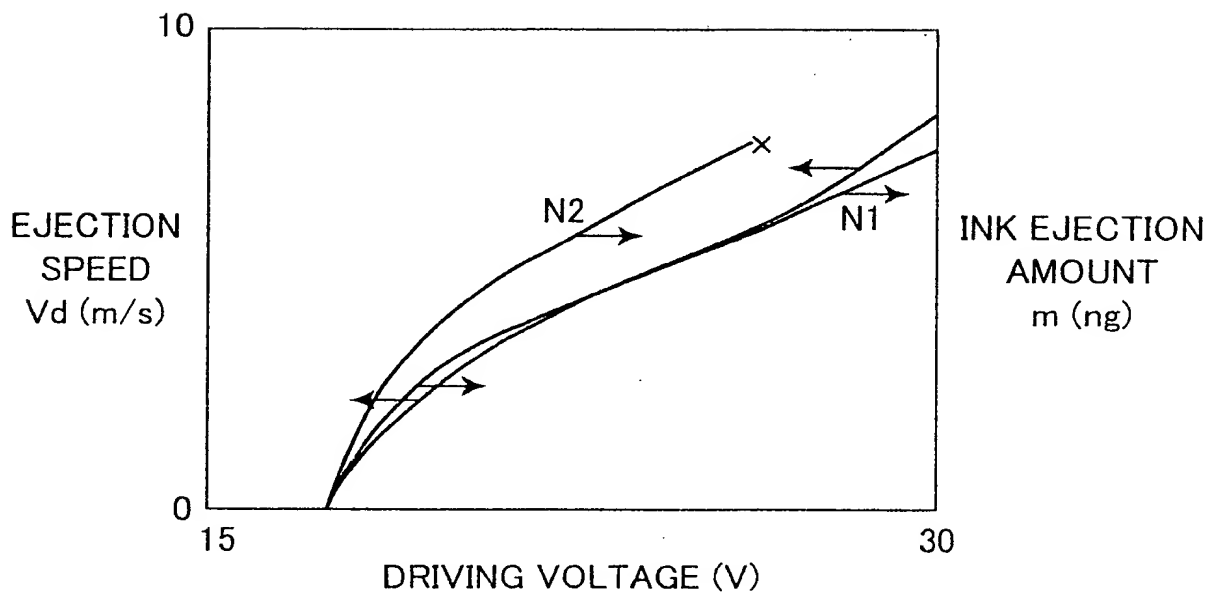
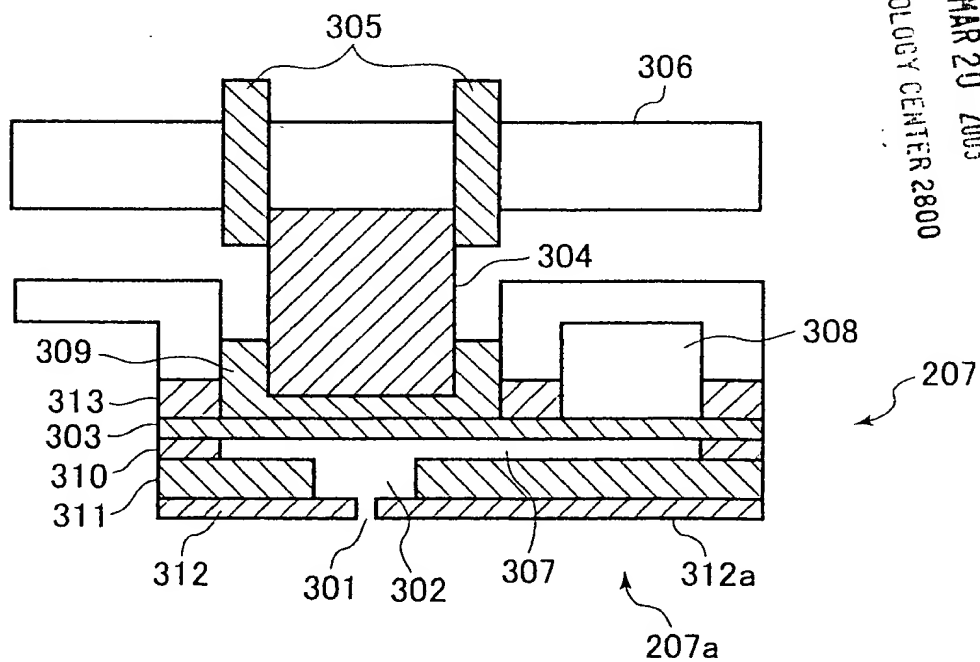


FIG.5



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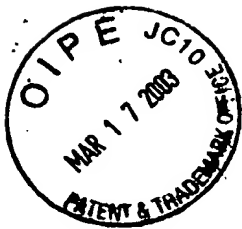
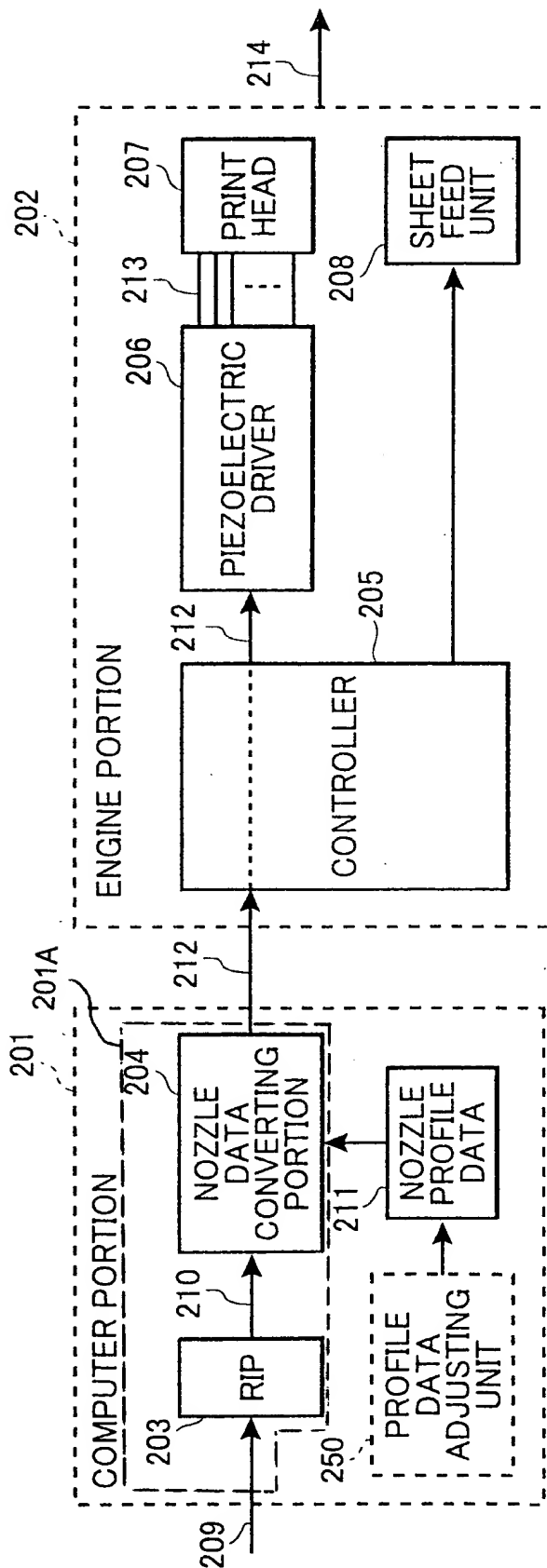


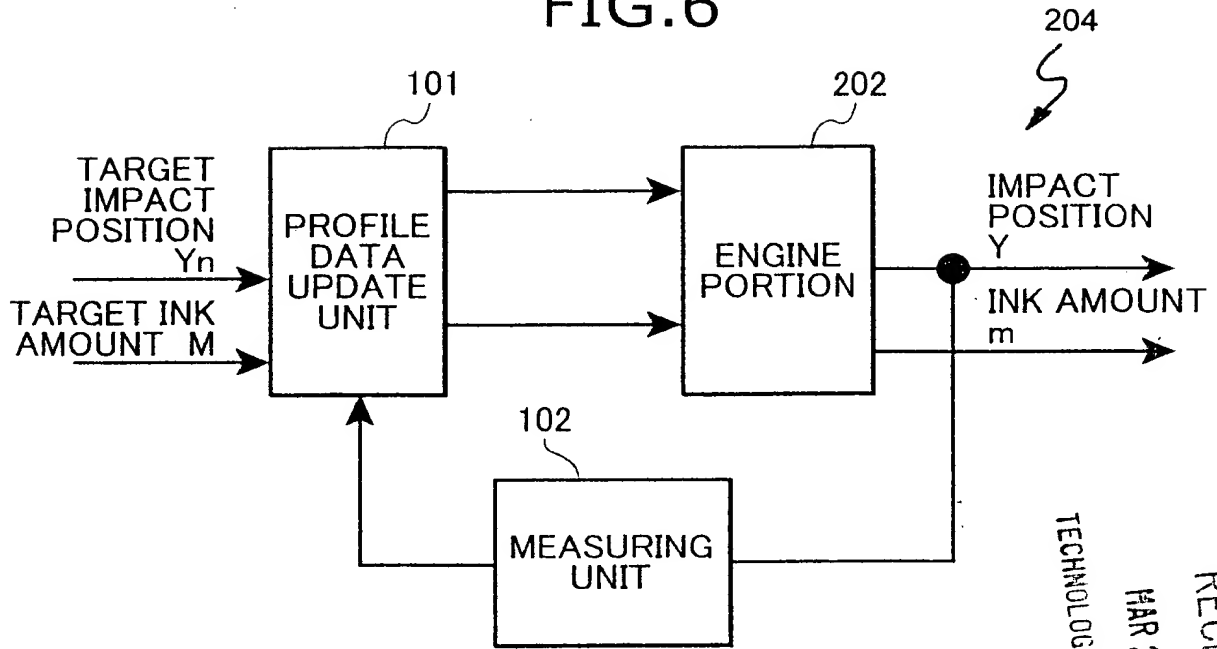
FIG.4



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FIG.6



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FIG.7

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NOZZLE NO.	COORDINATE VALUE		PULSE DATA 1	PULSE DATA 2	-----	PULSE DATA N
	x	y				
1						
2						
3						
⋮						
5,120						



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FIG.8

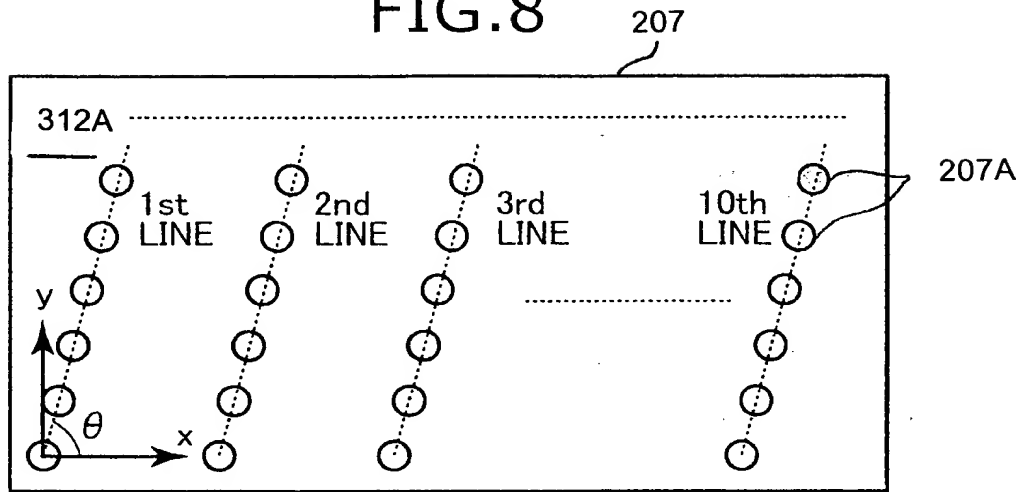
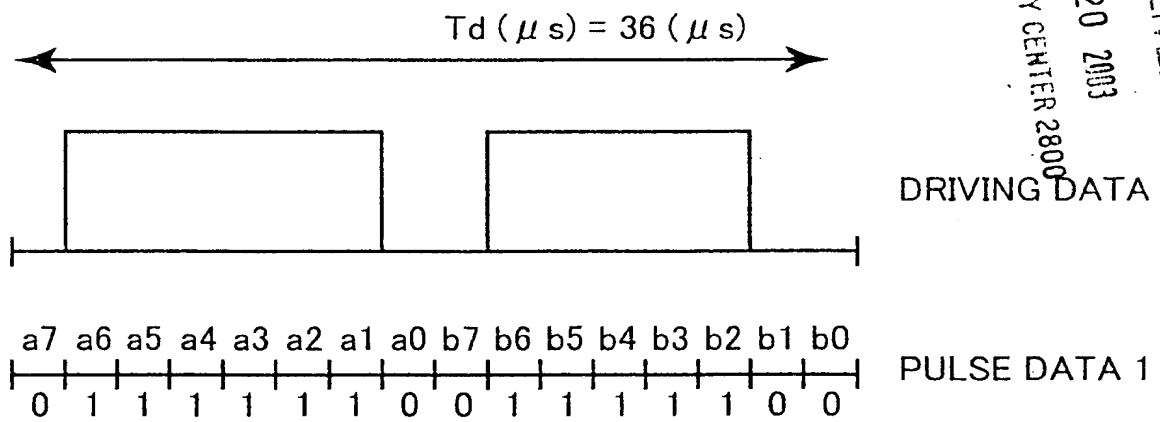
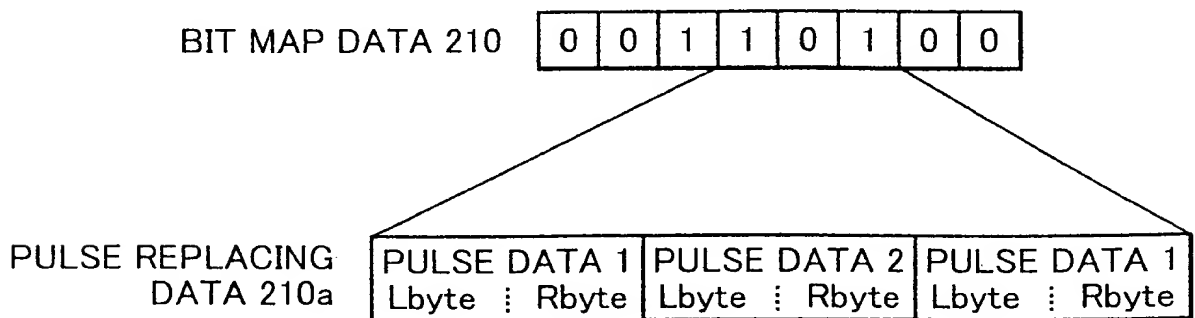


FIG.9



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FIG.10





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FIG.11

GRAPH F2

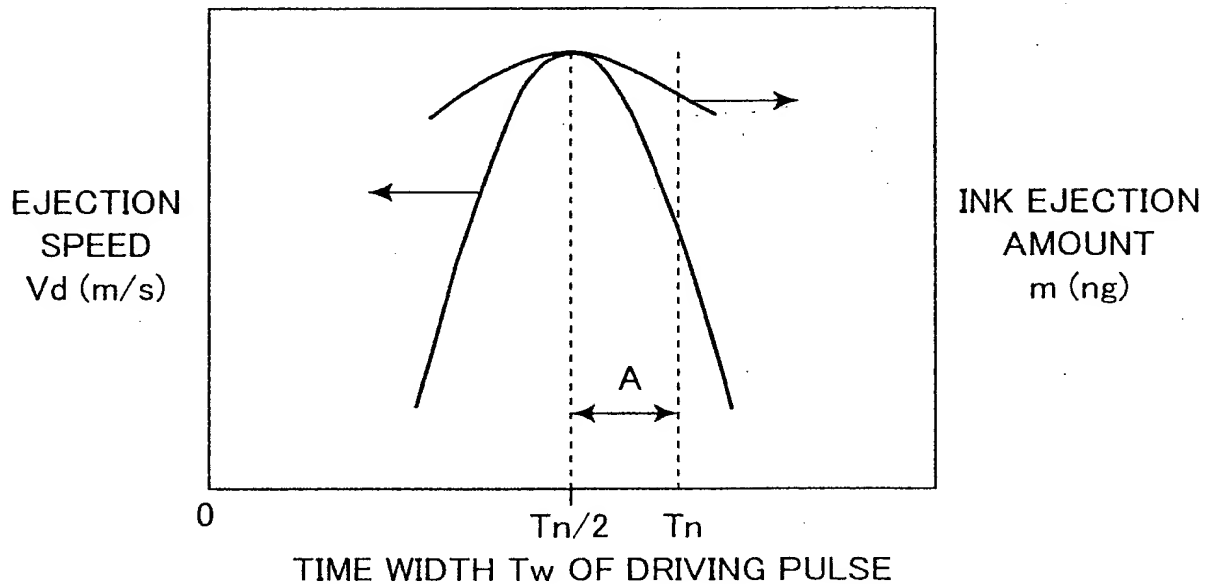


FIG.12(a)

GRAPH F3

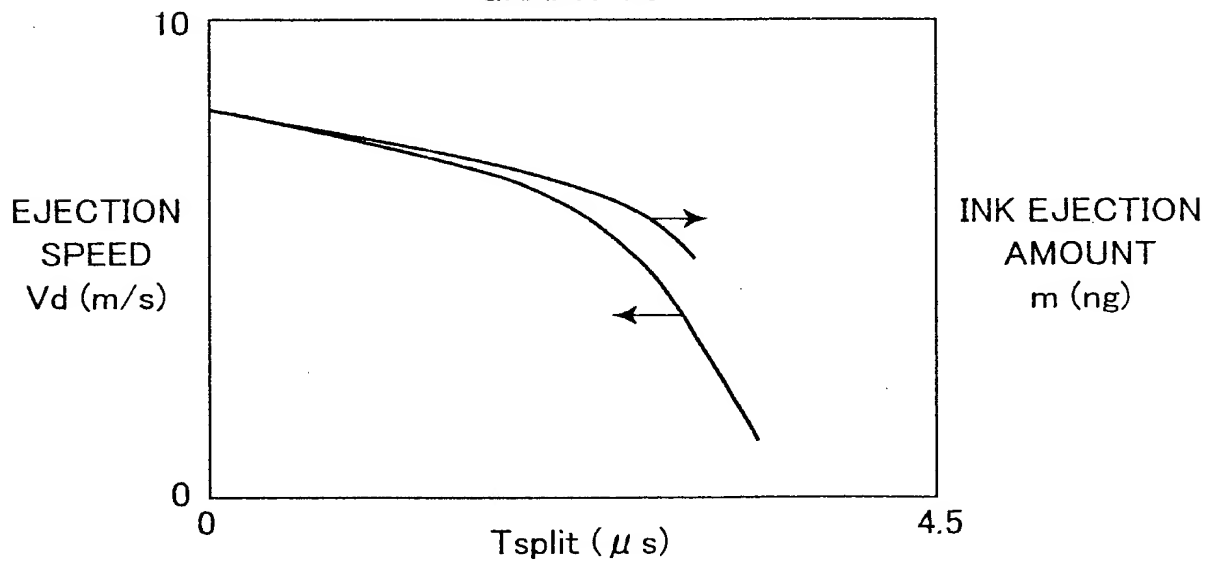


FIG.12(b)

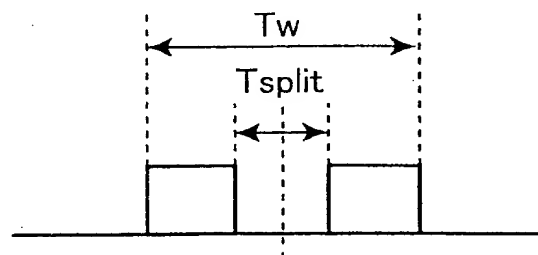


FIG. 13

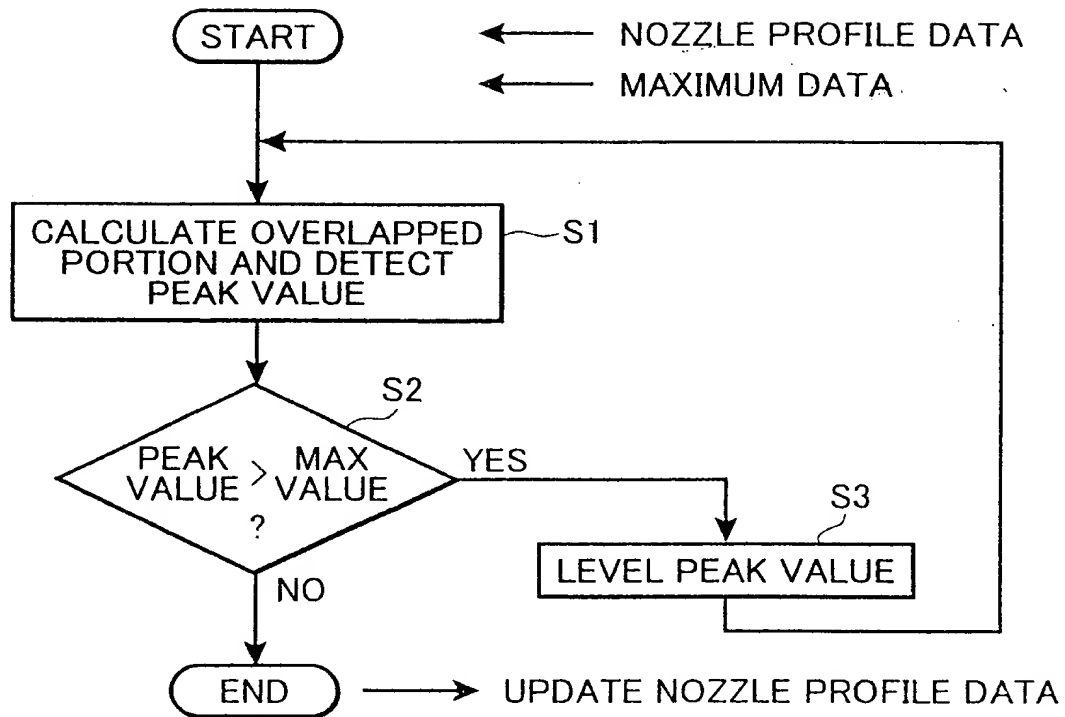
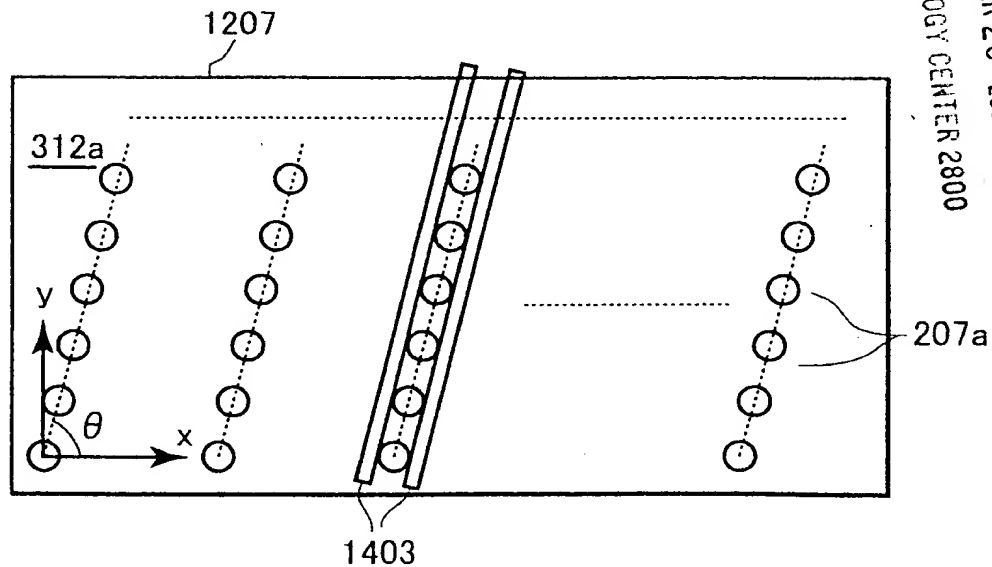


FIG. 14



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FIG.15

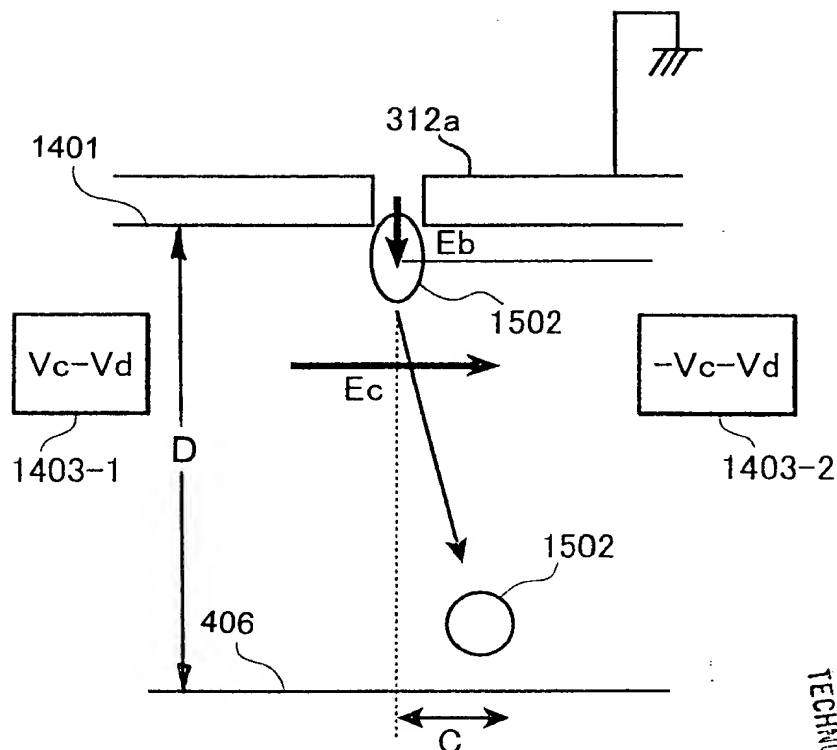
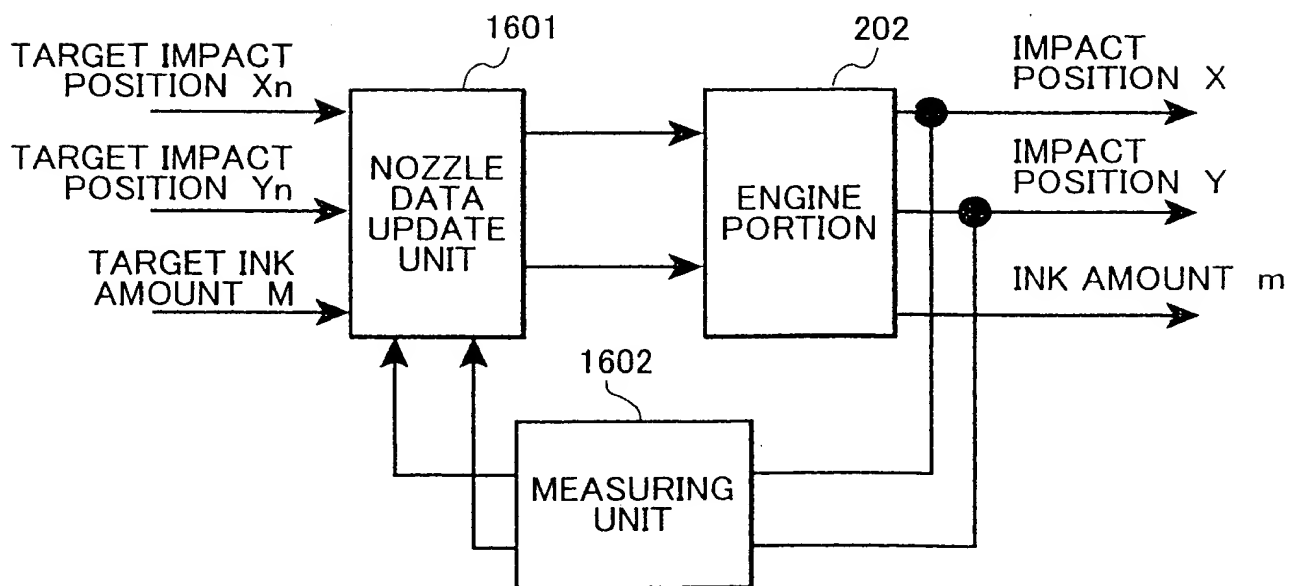


FIG.16



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FIG.17

NOZZLE NO.	COORDINATE VALUE		PULSE DATA 1	PULSE DATA 2	-----	PULSE DATA n
	x	y				
n1			07e0			
n2			03e0			
n3			03c0			

FIG.18

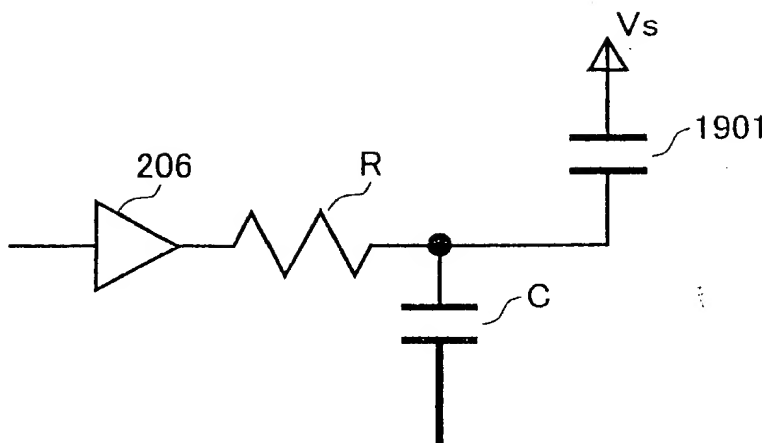
NOZZLE NO.	COORDINATE VALUE		PULSE DATA 1	PULSE DATA 2	-----	PULSE DATA n
	x	y				
n1			03c0			
n2			0340			
n3			02c0			

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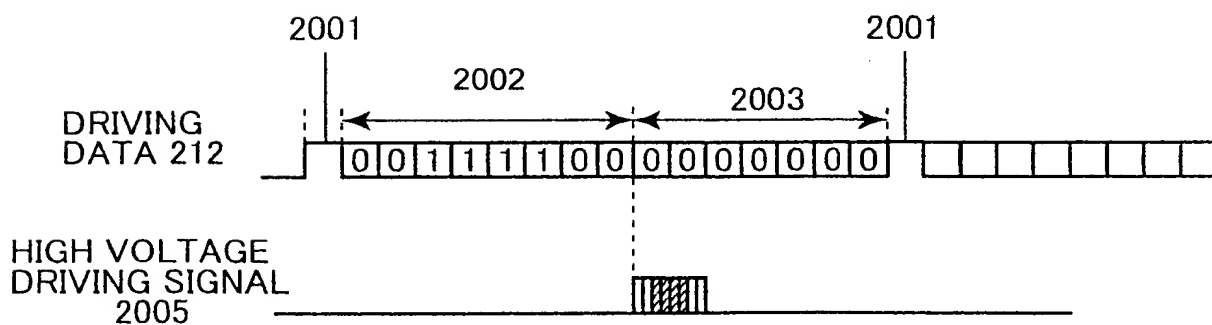
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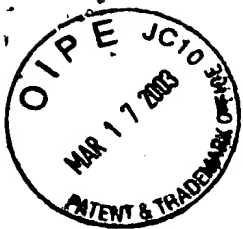
FIG.19



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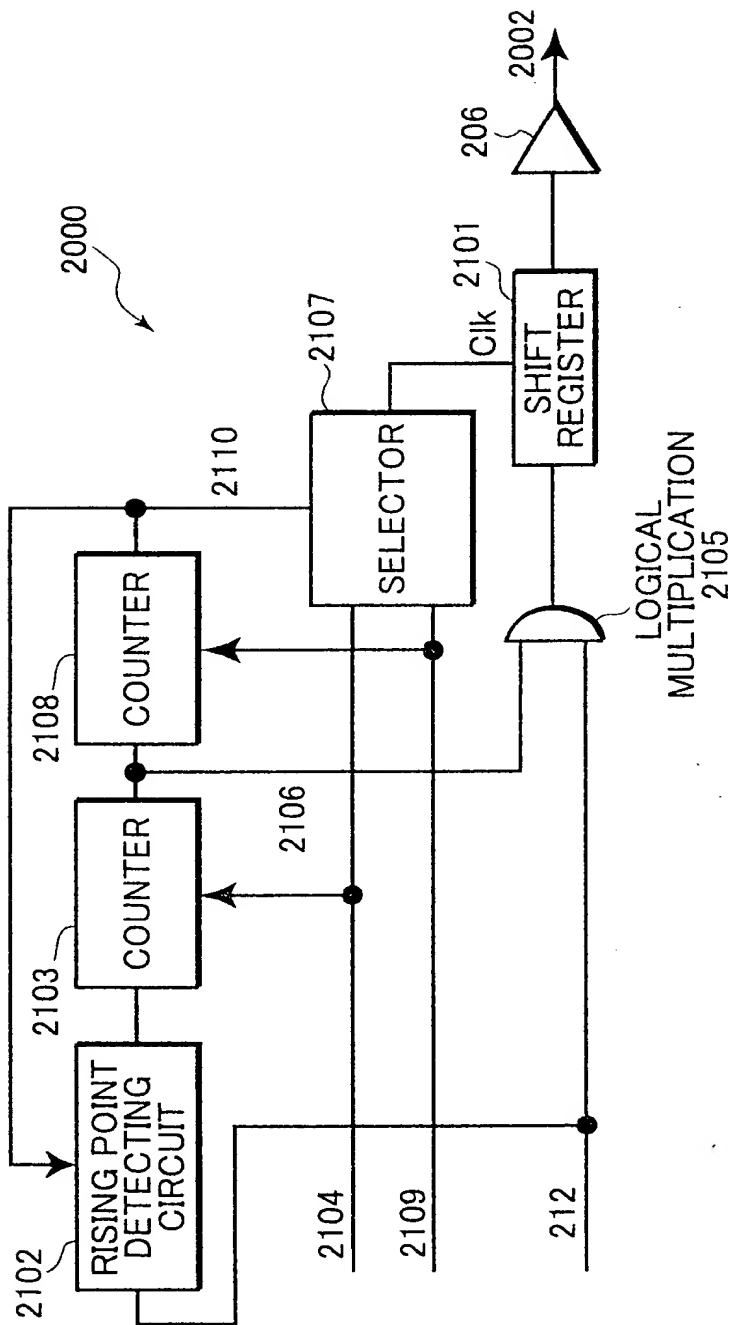
FIG.20





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FIG.21



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